FRYMASTER DEAN
8700 LINE AVENUE, SHREVEPORT , LA 71106
318-865-1711
800-551-86.33
844-724-CARE
WWW.FRYMASTER.COM
EMAIL: SERVICE@FRYMASTER.COM

Instruction Sheet

Subject: 8263272 Honeywell Dual Spark Ignition Module Conversion to Capable Controls Single Spark Ignition Module (Replaces Honeywell 8073366)

Models affected: OCF and LOV Fryers

Follow these instructions to install the enclosed Capable Controls spark ignition modules, 8075691. It is a replacement for Honeywell Dual spark module 8073366 in 30 pound fryers. Two single spark Capable Controls modules will replace the single Honeywell dual spark module. Use instructions below for LOV/OCF fryers.

In This Kit		
Part Number	**Description**	**Qty**
8070705	1/4" push-on terminal	3
8073484	Connector, Rajah	2
8075008	Cable, Ignition	2
8075691	Capable Controls ignition module	2
8090362	Screw, drill #8 x1" hex head	6
1086643	Wire Harness Cap Control FV Ign Mod	1
8052023	Wiring diagram FV DS-SS Conv Cap Controls	1
8242090	Cover, Weldment Ignition Module	1
8197202	Instructions	1

8073366
Honeywell
Dual Spark Module

8075691
Capable Controls
Spark Module

1. Remove power from the unit.
2. Remove the bezel.
3. Disconnect the controller.
4. Remove the ignition module cover to gain access to the module (see Figure 7).
5. Unplug the module harness from the interface board.
6. Loosen the blower motor nuts (remove the blower if necessary) to allow access to the module (see Figure 8).
7. Loosen the module mounting bracket nuts in bottom of the component box (see Figure 9).
8. Slide the module assembly towards the rear of component box until the nuts drop through the keyholes (see Figure 10).
9. Fryers that previously had Honeywell modules - Follow the instructions in the kit 8263270 to attach the new ignition modules to the Capable Controls mounting plates.
10. Label the wires prior to disconnecting from the existing spark module.
11. Disconnect all the wires from the module.
12. Replace the existing spade terminal on the yellow wire with the enclosed 8070705 1/4" push-on terminal.
13. Attach the enclosed Rajah connector on Pin 11 - (SPARK) on both modules.
14. Locate the enclosed harness. The end of the harness with three (3) female connectors will attach to the left module.
15. Attach the blue wire of the enclosed harness to Pin 3 (VALVE) on the left module.
16. Attach the black wire of the enclosed harness to Pin 5 (GND) on the left module.
17. Attach the red wire of the enclosed harness to Pin 6 (24V) on the left module.
18. Attach the opposite end of the blue wire, attached to left module in step 17, to the blue wire from the interface board (V1D).
19. Attach the opposite end of the black wire, attached to the left module in step 18, to pin 2 [GND (VALVE)] of the right module.
20. Attach the opposite end of the red wire, attached to the left module in step 19, to pin 3 (VALVE) of the right module.
21. Follow the wiring diagram on page 4 and wiring matrix

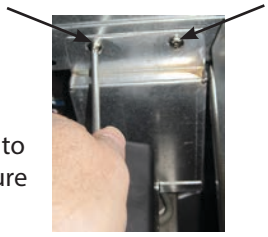


Figure 7

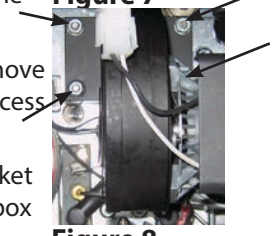


Figure 8

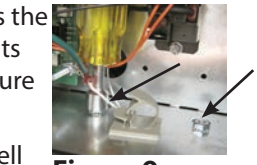


Figure 9

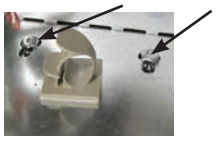


Figure 10

on page 3 as a guide to attach the remaining wires. Replace the spark cables with the new supplied spark cables. Ensure that the spark cable is in the cable clip on rear of the module box.

22. The left module should be wired as shown in Figure 11.
23. The right module should be wired as shown in Figure 12.
24. **DO NOT HOOK UP THE LEFT ALARM WIRE ON FULL VAT FRYERS.**
25. Reverse steps 1 through 8 to complete the procedure.
26. Attach the enclosed wiring diagram to the fryer door.
27. **Using the instructions on page 3 test the micro-amps and adjust if necessary.**
28. Restore power and test the fryer.

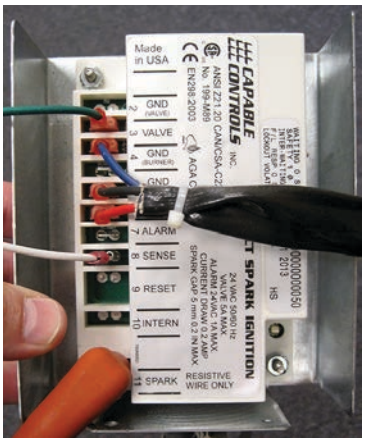


Figure 11 (left module wiring)

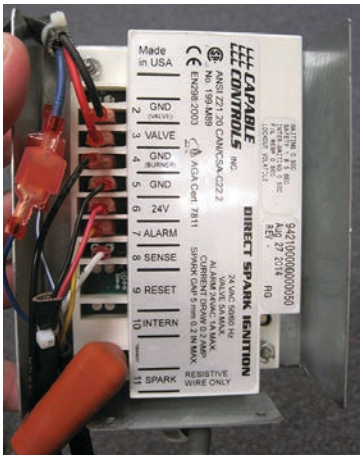


Figure 12 (right module wiring)

H50/H52/H55 Full Vat — Two Modules			
Interface Board (right)	**Wire Color**	**Honeywell Module**	**Right Capable Controls Module**
-	Black from Left Module	-	Pin 2 - GND (Valve)
-	Red from Left Module	-	Pin 3 - Valve
-	Black	GND (Burner)	Pin 4 - GND (Burner)
GND	Black from Optional Burner Ground or Optional White from Interface Board ground	25V (GND) or 24VAC GND	Pin 5 - GND
PWR	Red from Interface board	25V or 24VAC	Pin 6 - 24V
ALR	Yellow	Alarm	Pin 7 - Alarm
V1D	Blue to left Module	Valve-	-
-	Right Burner White	SENSE or Sensor	Pin - 8 SENSE
-	Right Burner Gray Spark Wire	SPARK	Pin 11 - SPARK
V1S	Blue/White	Not Used	Not Used
Interface Board (left)	**Wire Color**		**Left Capable Controls Module**
-	Green	-	Pin 2 - GND (Valve)
-	Blue from Interface Board (V1D connection on right harness connection)	-	Pin 3 - Valve
-	Black from Left Module	-	Pin 5 - GND
-	Red from Right module	-	Pin 6 - 24V
-	Left Burner White	-	Pin - 8 SENSE
-	Left Burner Gray Spark Wire	-	Pin 11 - SPARK

Testing Micro-amps

When the burner flame is properly adjusted, it will typically produce a current between 0.3 µA and 0.9µA on Capable Controls modules or between 3.0µA and 8.0µA on Honeywell modules. Lockouts can occur at currents 0.15µA or below on Capable Controls modules or 0.9µA or below on Honeywell modules. Flame current is measured by placing a microamp (not milliamp) meter in series with the sensing wire on the igniter. This is accomplished as follows:

1. Place the fryer power switch in the OFF position.
2. Disconnect the white sensing wire from one of the burner igniters (see Figure 13) and connect it to the positive lead of the meter. Connect the negative lead of the meter to the terminal from which the sensing wire was removed (see Figure 14).
3. Ensure that the meter is set to read micro-amps.
4. Place the fryer power switch in the ON position to light the burners. After the frypot temperature reaches 200°F (93°C), wait at least one minute before checking the reading. NOTE: The closer the unit is to normal operating temperature, the more accurate the reading will be.

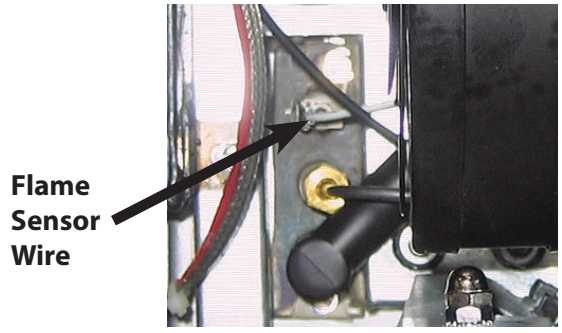


Figure 13

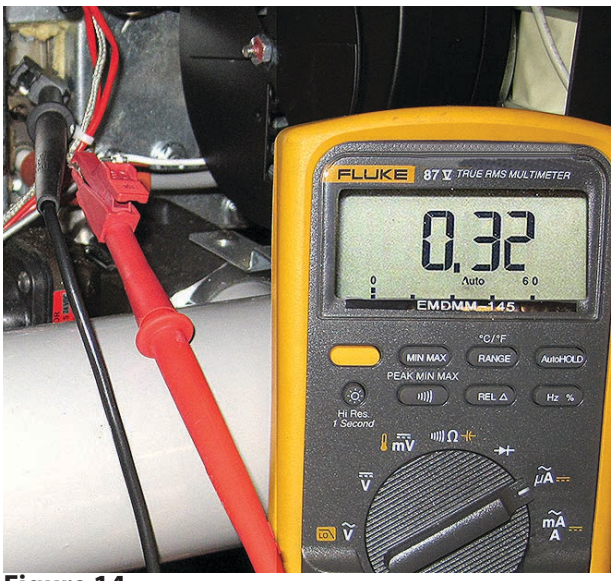
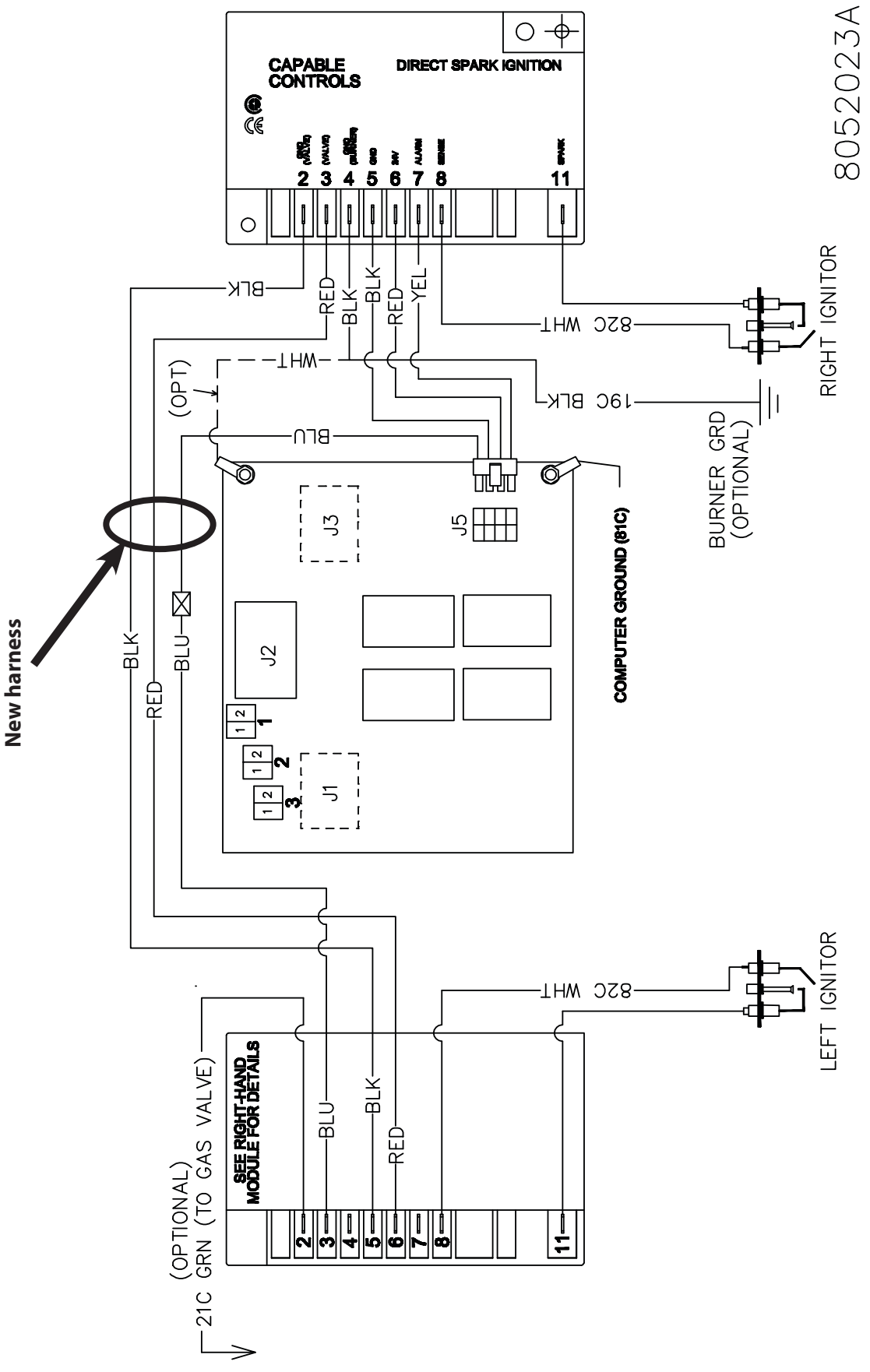


Figure 14


8052023A
CAPABLE CONTROLS
DIRECT SPARK IGNITION
2 3 4 5 6 7 8
11
BLK
RED
BLK
BLK
RED
YEL
WHT
(OPT)
BLU
82C WHT
19C BLK
RIGHT IGNITOR
BURNER GRD (OPTIONAL)
J3
J5
J2
J1
COMPUTER GROUND (81C)
New harness
BLK
BLU
RED
82C WHT
LEFT IGNITOR
SEE RIGHT HAND MODULE FOR DETAILS
BLU
BLK
RED
(OPTIONAL) 21C GRN (TO GAS VALVE)